



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

November 20, 2003

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Delco Electronics Corporation / 067-18089-00061

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-MOD.dot 9/16/03



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November 20, 2003

Mr. Jeff Blankenberger
Delco Electronics Corporation
P.O. Box 9005
Kokomo, Indiana 46904

Re: 067-18089-00061
Second Minor Source Modification to:
Part 70 permit No.: T067-6505-00061

Dear Mr. Blankenberger:

Delco Electronics Corporation was issued a Part 70 operating permit (T067-6505-00061) on October 21, 2002 for an electronic components manufacturing plant for the auto industry. An application to modify the source was received on September 2, 2003. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for modification at the source:

One (1) climate controlled clean room, designated as Fab III constructed in 1984 and modified in 2003, including one (1) wet process exhausting through four (4) wet scrubbers with maximum air flow rates of 40000 CFM each, and one (1) silicon wafer coating process.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(1) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This minor source modification authorizes construction of the modified emission units. Operating conditions shall be incorporated into the Part 70 operating permit as a minor permit modification in

accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the minor permit modification has been issued.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/YC

cc: File - Howard County
Howard County Health Department
Air Compliance Section Inspector - Marc Goldman
Compliance Data Section - Karen Ampil
Administrative and Development -Sara Cloe
Technical Support and Modeling - Michele Boner



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PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Delco Electronics Corporation
2100 East Lincoln Road
Kokomo, Indiana 46904-9005**

(herein known as the Permittee) is hereby authorizes to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T067-6505-00061	
Originally signed by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: October 21, 2002 Expiration Date: October 21, 2007

First Significant Permit Modification No. 067-16294-00061, issued April 14, 2003
First Administrative Amendment No.: 067-17300-00061, issued September 10, 2003
First Minor Source Modification No.: 067-17930-00061, pending

Second Minor Source Modification No.: 067-18089-00061	Affected Pages: 2, 7 through 10
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 20, 2003

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1, A.3, and A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a source which produces electronic components principally for the automotive industry.

Responsible Official:	Managing Director, Kokomo Operations
Source Address:	2100 East Lincoln Road, Kokomo, Indiana 46904-9005
Mailing Address:	P.O. Box 9005, Kokomo, Indiana 46904-9005
General Source Phone Number:	(765) 451-6738
SIC Code:	3089, 3469, 3471, 3651, 3672, 3674, 3679, 3694
County Location:	Howard
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This source which produces electronic components principally for the automotive industry consists of Plants 6, 7, and 9 (Plant ID 067-00022); Plants 8, and 10 (Plant ID 067-00023); and Fab III (Plant ID 067-00051), located respectively at 1800 - 2100 and 2150 East Lincoln Road and 2033 East Boulevard Avenue, Kokomo, Indiana.

Since these plants are located on contiguous or adjacent properties, belong to the same industrial grouping, and are under common control of the same entity, they will be considered one (1) source. One combined Part 70 Permit will be issued to Delco Electronics Corporation. The new plant ID for the combined source is 067-00061.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) wave soldering system, referred to as EU_WS, and comprised of the following emission units:
- (1) One (1) wave solder machine, ID #184842 (Plant 9, Dept. 270E), constructed in 1997, with a capacity of 500 boards per hour, 5.78 pounds of flux per hour, and 0.09 pounds of thinner per hour, and exhausting to stack 9-E98-1;
 - (2) One (1) selective soldering machine, ID #2700001 (Plant 9, Dept. 270S), constructed in 1998, with a capacity of 90 boards per hour, 0.738 pounds of flux per hour, and no thinner use, and exhausting to stack 9-F98-1;
 - (3) One (1) wave solder machine, ID #1015805 (Plant 7, Dept. 286), constructed in 2003, with a capacity of 600 boards per hour, 6.65 pounds of flux per hour, and 1.77 pounds of thinner per hour, and exhausting to stack 7-S22-1;

- (4) One (1) wave solder machine, ID #181019, (Plant 9, Dept. 9602), constructed in 1991, with a capacity of 515 boards per hour, and exhausting to stack 9-F8-1;
 - (5) Nine (9) soldering machines, (Tech 2000 - Dept. 9502); two (2) constructed in 1999, ID#169964 and 208554; one (1) constructed in 2001; one (1) to be constructed in 2002; two (2) to be constructed in 2003; and three (3) to be constructed in 2004; all received approval in 067-10500-00061, with a capacity of 90 boards per hour each, and exhausting to stack 9-Z21-1 and 9-Z21-2; and
 - (6) One (1) wave soldering machine, ID #60000984, (Plant 7, Dept. 7661), constructed in 1996, with a capacity of 450 boards per hour, and exhausting to stack 7-T18-1.
- (b) One (1) surface coating system, referred to as EU_SC, with conformal coating applied to populated fiberglass circuit boards, paints applied to plastic radio and air control buttons and plastic face plates, comprised of the following emission units:
- (1) Two (2) conformal coating hoods, (Plant 7, Dept. 7086), constructed in 1996, with a maximum capacity of 200 boards per hour, venting to stack 7-S18-1;
 - (2) Four (4) automated select conformal coaters, (Plant 7, Dept. 7130), with a maximum capacity of 222 pounds of circuit board per hour, constructed in 2002, with no control exhausting to stack 7-T22-1;
 - (3) One (1) conformal coater, ID #182386, (Plant 9, Dept. 7641), constructed in 1991, with a capacity of 515 boards per hour with no control, and exhausting to stack 9-C4-1;
 - (4) One (1) paint spray booth 1, ID #153415, (Plant 9, Dept. 962), constructed in 1985, with a maximum coating usage of 1.5 gallons per hour, with waterwalls for control, and exhausting to stack 9-C17-1; and
 - (5) One (1) paint booth to coat automotive plastic parts, ID #165441, (Plant 9, Dept. 964), constructed in 1993, with a maximum coating usage of 0.89 gallons per hour with waterwalls for control, and exhausting to stack 9-C15-1.
- (c) One (1) combustion system, referred to as EU_CO, comprised of the following emission units:
- (1) One (1) natural gas-fired boiler, referred to as Boiler #9, Plt. 6, ID #16554, constructed in 1977, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 6-K12-1;
 - (2) One (1) natural gas-fired boiler, referred to as Boiler #10, Plt. 6, ID #21492, constructed in 1980, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 6-K12-2;
 - (3) One (1) natural gas-fired boiler, referred to as Boiler #1E, Plt. 8, ID #38302, constructed in 1966, with a capacity of 14.6 MMBtu/hr, and exhausting to stack 8-A11-3;
 - (4) One (1) natural gas-fired boiler, referred to as Boiler #2E, Plt. 8, ID #13313, constructed in 1966, with a capacity of 14.6 MMBtu/hr, and exhausting to stack 8-A11-4;

- (5) One (1) natural gas-fired boiler, referred to as Boiler #3E, Plt. 8, ID #13312, constructed in 1966, with a capacity of 14.6 MMBtu/hr, and exhausting to stack 8-B11-1;
- (6) One (1) natural gas-fired boiler, referred to as Boiler #1W, Plt. 8, ID #852, constructed in 1967, with a capacity of 14.6 MMBtu/hr, and exhausting to stack 8-A13-4;
- (7) One (1) natural gas fired boiler, referred to as Boiler Clayton 8W1, Plt. 8, constructed in 1996, with a capacity of 24.5 MMBtu/hr, and exhausting to stack 8-A13-7;
- (8) One (1) natural gas-fired boiler, referred to as Boiler Clayton 8W2, Plt. 8, constructed in 1996, with a capacity of 24.5 MMBtu/hr, and exhausting to stack 8-A13-8;
- (9) One (1) natural gas-fired boiler, referred to as Boiler West (831), Plt. 8, ID #17383, constructed in 1980, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 8-J27-1;
- (10) One (1) natural gas-fired boiler, referred to as Boiler #8W, Plt. 9, ID #840, constructed in 1967, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 9-C25-2;
- (11) One (1) natural gas-fired boiler, referred to as Boiler #6W, Plt 9, ID #841, constructed in 1967, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 9-C25-4;
- (12) One (1) natural gas-fired boiler, referred to as Boiler #5W, Plt. 9, ID #5569, constructed in 1967, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 9-C25-1;
- (13) One (1) natural gas-fired boiler, referred to as Boiler #3E, Plt. 9, ID #181067, constructed in 1990, with a capacity of 20.922 MMBtu/hr, and exhausting to stack 9-F10-2;
- (14) One (1) natural gas-fired boiler, referred to as Boiler #2E, Plt. 9, ID #839, constructed in 1967, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 9-F10-5;
- (15) One (1) natural gas-fired boiler with No. 2 fuel oil backup, referred to as Boiler #1, Fab III, ID #151563, constructed in 1984, with a capacity of 20.9 MMBtu/hr, and exhausting to stack 3-W6-M;
- (16) One (1) natural gas-fired boiler with No 2 fuel oil backup, referred to as Boiler #2, Fab III, ID #151562, constructed in 1984. with a capacity of 20.9 MMBtu/hr, and exhausting to stack 3-W6-M;
- (17) One (1) natural gas-fired boiler, referred to as Boiler #3, Fab III, ID #8294003, constructed in 1992, with a capacity of 20.9 MMBtu/hr, and exhausting to stack 3-W6-M;
- (18) One (1) natural gas fired Cleaver-Brooks 350 hp boiler, referred to as Boiler #1 Plt. 10, constructed in 2001, with a capacity of 14.65 MMBtu/hr, and exhausting to stack 10-E10-1;

- (19) One (1) natural gas fired Cleaver-Brooks 350 hp boiler, referred to as Boiler #2 Plt. 10, ID #201182, constructed in 1995, with a capacity of 14.65 MMBtu/hr, and exhausting to stack 10-E10-1;
 - (20) Four (4) dynamometer testing cells, known as cells 1 through 4, constructed in 1997, each equipped with a 4,000 acfm exhaust stack, total capacity: 3.75 gallons of unleaded motor fuel burned per hour, and exhausting to stack 9-E85-1; and
 - (21) One (1) natural gas-fired boiler, referred to as Boiler MOS, Plt 8, ID #15917, constructed in 1977, with a capacity of 12.6 MMBtu/hr, and exhausting to stack 8-K18-1.
- (d) One (1) degreasing system, referred to as EU_DG, comprised of the following emission units:
- (1) Two (2) semi-aqueous cleaners for ceramic substrates, (Plant 6, Depts. 850 & 851), ID #190387 and 190388, constructed in 1993 with #190387 replaced in 2002, with a maximum throughput of 1,500 ceramic substrates each, and exhausting to stacks 6-N6-1 and 6-M19-2, respectively; and
 - (2) One (1) halogenated degreaser, (Plant 8, Dept. 889) ID #161437, constructed in 1987 with a maximum capacity of 750 boards per hour.
- (e) One (1) quad-fine-pitch (QFP) plater with a 3400 CFM fume scrubber, constructed in 1992, referred to as EU_EP, and exhausting to stack 6-K24-3.
- (f) One (1) semiconductor system, referred to as EU_CR, consisting of the following emission units:
- (1) One (1) acid mixing operation for nitric, phosphoric, sulfuric, and hydrofluoric acids, constructed in 1980, with an average throughput of 9,990 gallons/yr of sulfuric acid, 3,400 gallons/yr of phosphoric acid, 7,400 gallons/yr of nitric acid, 8,000 gallons/yr of hydrofluoric acid, and 4,100 gallons/yr of acetic acid, controlled by one (1) fume scrubber, also constructed in 1980, with a maximum capacity of 25,000 CFM.
 - (2) One climate controlled clean room, designated as Fab I, constructed in 1981, including one (1) wet process exhausting through five (5) wet scrubbers with maximum air flow rates of 3400 CFM, 8950 CFM, 12150 CFM, 20000 CFM, and 20000 CFM, respectively, and one (1) silicon wafer coating process.
 - (3) One (1) climate controlled clean room, designated as Fab V, constructed in 1981, including one (1) wet process exhausting through two (2) wet scrubbers with maximum air flow rates of 12000 CFM and 16000 CFM, and one (1) silicon wafer coating process.
 - (4) One (1) climate controlled clean room, designated as Fab III constructed in 1984 and modified in 2003, including one (1) wet process exhausting through four (4) wet scrubbers with maximum air flow rates of 40000 CFM each, and one (1) silicon wafer coating process.
- A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
 - (1) One (1) natural gas-fired boiler referred to as Boiler TTC, ID # 9424001, constructed in 1993, with a capacity of 1.8 MMBtu/hr [326 IAC 6-2-4];
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 [326 IAC 8-3-2] [326 IAC 8-3-5];
 - (1) Five (5) cold cleaners in Plant 6, constructed pursuant to CP067-3262-00022;
 - (2) One (1) cold cleaner in Plant 7;
 - (3) Four (4) cold cleaners in Plant 8;
 - (4) Twelve (12) cold cleaners in Plant 9; and
 - (5) Two (2) cold cleaners in Plant 10.
- (c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone [326 IAC 6-3-2];
- (d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations [326 IAC 6-3-2]; and
- (e) Sources emitting less than five (5) tons per year of PM, ten (10) tons per year of VOC, one (1) ton per year of a single HAP, and two and a half (2.5) tons per year of any combination of HAPs [326 IAC 6-3-2] [40 CFR 52, Subpart P]:
 - (1) One (1) wave solder machine, ID #202031, Dept. 7120, constructed in 1999;
 - (2) One (1) wave solder machine, Dept. 7120, constructed in 1999;
 - (3) One (1) wave solder machine, ID #1012806, Dept. 7120, constructed in 1999;
 - (4) One (1) wave solder machine, ID# 194110 (Plant 9, Department 9601), constructed in 1991, with a capacity of 280 boards per hour, and exhausting to Stack 9-F7-1;
 - (5) One (1) wave solder machine, ID#186604 (Plant 9, Dept. 9602), constructed in 1991, with a capacity of 515 boards per hour, and exhausting to stack 9-F7-2;
 - (6) One (1) wave solder machine, ID#165812 (Plant 9, Dept. 9604), constructed in 1983, with a capacity of 280 boards per hour, and exhausting to stack 9-C8-1; and
 - (7) Solvent cleaners utilizing predominantly non-photochemically reactive compounds, emitting less than 15 lb/day.
 - (8) Two (2) maintenance spray booths, constructed in 2003, located in the Central Maintenance Shop, with a total maximum paint usage of 0.71 gallons per hour, both controlled by dry filters.

- (f) Diesel generators not exceeding one thousand six hundred (1,600) horsepower.

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (e) One (1) quad-fine-pitch (QFP) plater with a 3400 CFM fume scrubber, constructed in 1992, referred to as EU_EP, and exhausting to stack 6-K24-3.
- (f) One (1) semiconductor system, referred to as EU_CR, consisting of the following emission units:
 - (1) One (1) acid mixing operation for nitric, phosphoric, sulfuric, and hydrofluoric acids, constructed in 1980, with an average throughput of 9,990 gallons/yr of sulfuric acid, 3,400 gallons/yr of phosphoric acid, 7,400 gallons/yr of nitric acid, 8,000 gallons/yr of hydrofluoric acid, and 4,100 gallons/yr of acetic acid, controlled by one (1) fume scrubber, also constructed in 1980, with a maximum capacity of 25,000 CFM.
 - (2) One climate controlled clean room, designated as Fab I, constructed in 1981, including one (1) wet process exhausting through five (5) wet scrubbers with maximum air flow rates of 3400 CFM, 8950 CFM, 12150 CFM, 20000 CFM, and 20000 CFM, respectively, and one (1) silicon wafer coating process.
 - (3) One (1) climate controlled clean room, designated as Fab V, constructed in 1981, including one (1) wet process exhausting through two (2) wet scrubbers with maximum air flow rates of 12000 CFM and 16000 CFM, and one (1) silicon wafer coating process.
 - (4) One (1) climate controlled clean room, designated as Fab III constructed in 1984 and modified in 2003, including one (1) wet process exhausting through four (4) wet scrubbers with maximum air flow rates of 40000 CFM each, and one (1) silicon wafer coating process.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Hazardous Air Pollutants (HAPs) [40 CFR 63.50 through 63.56]

- (a) The input of hexane to the conformal coaters and spray booths (Section D.2), the degreasers (Sections D.4 and D.5), and the semiconductor manufacturing process (part of this section), minus the hexane shipped out in the waste stream, shall be less than seven and two-tenths (7.2) tons, combined, per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is structured such that, when including the hexane emissions from the combustion units and insignificant activities, the source total hexane emissions remain less than ten (10) tons per year.
- (b) The input of any single HAP, other than hexane, to the conformal coaters and spray booths (Section D.2), the degreasers (Sections D.4 and D.5), and the semiconductor manufacturing process (part of this section), minus the quantity of that single HAP shipped out in the waste stream, shall be less than nine and eight-tenths (9.8) tons, combined, per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is structured such that, when including the single HAP, other than hexane, emissions from the combustion units and insignificant activities, the source total single HAP, other than hexane, emissions remain less than ten (10) tons per year.

- (c) The input of any combination of HAPs to the conformal coaters and spray booths (Section D.2), the degreasers (Sections D.4 and D.5), and the semiconductor manufacturing process (part of this section), minus the quantity of HAPs shipped out in the waste stream, shall be less than twenty-two (22.0) tons, combined, per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is structured such that, when including the emissions of any combination of HAPs from the combustion units and insignificant activities, the source total emissions of any combination of HAPs remain less than twenty-five (25) tons per year.

Compliance with these limitations renders the requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) not applicable.

D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

The potential VOC emissions from each of the climate controlled clean rooms Fab I, Fab V, and Fab III before control are less than 25 tons per year. Therefore the requirements of 326 IAC 8-1-6 are not applicable.

Any change or modification which may increase the potential emissions of VOC, which are calculated using the total VOC input minus the VOC in the shipped out waste, to greater than 25 tons per year from these units must be approved by the Office of Air Quality before any such change may occur.

D.6.3 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the QFP plater and semiconductor manufacturing units shall not exceed the pounds per hour limitation calculated using the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.6.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.6.5 Particulate Matter

In order to comply with Condition D.6.3, the fume and wet scrubbers shall be in operation and control emissions from the facilities at all times that the facilities are in operation.

D.6.6 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs)

Compliance with the VOC and HAP content and usage limitations contained in Conditions D.6.1 and D.6.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by using formulation data supplied by the coating and solvent manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.7 Parametric Monitoring

- (a) The Permittee shall monitor and record the scrubber liquor pH, pressure drop, and recirculation flow rate of each of the scrubbers, at least once per week when the associated facilities are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the scrubbers is outside the following normal ranges:

Scrubber	Pressure Drop (inches of water)
Acid mixing scrubber	0.1 - 3
Fab 1 scrubber - Dept. 8026 5ID Room TRI-MER DE No. 169970	0.1 - 1.2
Fab 1 scrubber - 5ID Room (Dept. 8026) Harrington DE No. (none)	0.1 - 2.5
Fab 1 scrubber - SensorFAB (8026) Harrington DE No. 177150 (826B)	0.1 - 3
Fab 1 scrubber - Dept. 8026 SensorFAB East (VIRON) DE No. (none) (SB101A)	0.1 - 3.5
Fab 1 scrubber - Dept. 8026 SensorFAB West (VIRON) DE No. (none) (SB100A)	0.1 - 3.5
Fab V scrubber - Dept. 8327 Bump Room (VIRON) DE No. 198849 (SB104)	0.1 - 3.5
Fab V scrubber - Dept. 8327 Bump Room (Harrington) DE No. 158827	0.1 - 3
QFP scrubber	0.1 - 1.2
Fab III - Dept. 8294 SC-1 (Heil)	0.5 - 8
Fab III - Dept. 8294 SC-2 (Heil)	0.5 - 8
Fab III - Dept. 8294 SC-3 (Heil)	0.5 - 8
Fab III - Dept. 8294 SC-4 (Heil)	0.5 - 8

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. When for any one reading, the recirculation flow rate of each of the scrubbers is outside the following normal ranges:

Scrubber	Recirculation Flow Rate (gpm)
Acid mixing scrubber	150 - 350
Fab 1 scrubber - Dept. 8026 5ID Room TRI-MER DE No. 169970	3 - 30
Fab 1 scrubber - 5ID Room (Dept. 8026) Harrington DE No. (none)	100 - 180
Fab 1 scrubber - SensorFAB (8026) Harrington DE No. 177150 (826B)	100 - 180
Fab 1 scrubber - Dept. 8026 SensorFAB East (VIRON) DE No. (none) (SB101A)	140 - 200
Fab 1 scrubber - Dept. 8026 SensorFAB West (VIRON) DE No. (none) (SB100A)	140 - 200
Fab V scrubber - Dept. 8327 Bump Room (VIRON) DE No. 198849 (SB104)	100 - 180
Fab V scrubber - Dept. 8327 Bump Room (Harrington) DE No. 158827	120 - 180
QFP scrubber	3 - 15
Fab III - Dept. 8294 SC-1 (Heil)	200 - 340
Fab III - Dept. 8294 SC-2 (Heil)	200 - 340

Fab III - Dept. 8294 SC-3 (Heil)	200 - 340
Fab III - Dept. 8294 SC-4 (Heil)	200 - 340

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. When for any one reading, the scrubber liquor pH of each of the scrubbers is outside the pH range of 5 to 9 or a scrubber liquor pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure drop, recirculation flow rate, or scrubber liquor pH reading that is outside of the above mentioned ranges is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

- (b) Each room shall be equipped with an alarm to indicate possible scrubber failure. In the event of an alarm, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.8 Record Keeping Requirements

- (a) To document compliance with Condition D.6.1, the Permittee shall maintain records of the hexane input minus the hexane shipped out in the waste stream, the single HAP input minus the quantity of that single HAP shipped out in the waste stream, and the combination HAP input minus the quantity of HAPs shipped out in the waste stream for the conformal coaters and spray booths (Section D.2), the degreasers (Sections D.4 and D.5), and the semiconductor manufacturing process (part of this section), combined.
- (b) To document compliance with Condition D.6.2, the Permittee shall maintain records of the VOC input minus the VOC collected as waste to the units listed in Condition D.6.2.
- (c) In order to document compliance with Condition D.6.7, the permittee shall maintain records of the following operational parameters for each of the scrubbers once per week during normal operation:
- (1) Pressure drop;
 - (2) Recirculation flow rate; and
 - (3) Scrubber liquor pH (pH Level).
- (d) The Permittee shall maintain records of any alarms that sound and the response steps taken.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.6.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source Modification and a Part 70 Minor Permit Modification

Source Background and Description

Source Name:	Delco Electronics Corporation
Source Location:	2100 East Lincoln Road, Kokomo, Indiana 46904
County:	Howard
SIC Code:	3089, 3469, 3471, 3651, 3672, 3674, 3679, 3694
Operation Permit No.:	T067-6505-00061
Operation Permit Issuance Date:	October 21, 2002
Minor Source Modification No.:	067-18089-00061
Minor Permit Modification No.:	067-18036-00061
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed a modification application from Delco Electronics Corporation relating to the modification of the following emission units and pollution control devices:

One (1) climate controlled clean room, designated as Fab III constructed in 1984 and modified in 2003, including one (1) wet process exhausting through four (4) wet scrubbers with maximum air flow rates of 40000 CFM each, and one (1) silicon wafer coating process.

History

Delco Electronics Corporation is an existing automotive industry electronic components manufacturing plant and their Part 70 permit (T067-6505-00061) was issued on October 21, 2002. On September 2, 2003, Delco Electronics Corporation submitted an application to the OAQ requesting a modification to the operations at the existing climate controlled clean room Fab III, which includes the wet process (currently designated as "Fab III wet room") and the silicon wafer coating process (currently designated as "Fab III yellow room"). The source indicated that these two operations are physically located in one single climate controlled clean room Fab III. The operations at this climate controlled clean room were constructed in 1984 and the total potential VOC emissions from room Fab III were less than 10 tons/yr before control.

In order to improve the product quality, the source proposed to increase the frequency of the wipe down process in clean room Fab III, which includes both the wet process and the silicon wafer coating process. The potential VOC emissions from clean room Fab III will be increased due to the increase in cleaning solvent usage (mainly Isopropyl Alcohol). The change in cleaning frequency is a change in operation methods and is considered a modification to the existing clean room Fab III. The potential VOC emissions before control (which were calculated using the VOC input minus the VOC in the shipped out waste) from clean room Fab III after this modification are less than 25 tons/yr. Therefore, the requirements of 326 IAC 8-1-6 (BACT) are not applicable.

The wet process (currently designated as "Fab III wet room") and the silicon wafer coating process (currently designated as "Fab III yellow room") are physically located in one single climate controlled clean room, and the emissions from this climate controlled clean room are considered coming from one single emission unit. Therefore, the unit description for the climate controlled clean room Fab III will be revised to include both the wet process and the silicon wafer coating process. The same revision will be applied to the similar operations at the climate controlled clean rooms Fab I and Fab V.

VOC emissions from the wet process at the clean room Fab III are currently controlled by four (4) wet scrubbers. In order to maximize the scrubber efficiencies, the source requested to increase the normal operation range for these scrubbers from 160 - 280 gal/min to 260 - 340 gal/min in the first Administrative Amendment #067-17300-00061, issued on September 10, 2003. In a letter received on September 24, 2003, the source indicated that the flow range information submitted for the Administrative Amendment #067-17300-00061, issued on September 10, 2003, was incorrect and the corrected flow rate range for these scrubbers should be 200 - 340 gal/min. Therefore, the flow rate range for these scrubbers will be revised in this permit modification.

Source Definition

This source, which produces electronic components principally for the automotive industry, consists of the following plants:

- (a) Plants 6, 7, and 9 (Plant ID 067-00022), located at 1800 - 2100 East Lincoln Road, Kokomo, Indiana;
- (b) Plants 8, and 10 (Plant ID 067-00023), located at 2150 East Lincoln Road, Kokomo, Indiana; and
- (c) Fab III (Plant ID 067-00051), located at 2033 East Boulevard Avenue, Kokomo, Indiana.

Since these plants are located on contiguous or adjacent properties, belong to the same industrial grouping, and are under common control of the same entity, IDEM, OAQ has determined that these plants are considered one (1) single source. This determination was made during the review of the source's Part 70 Permit (T067-6505-00061, issued on October 21, 2002) and will apply to this modification as well.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification and the Part 70 Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 2, 2003. Additional information was received on September 10, 2003, September 24, 2003, October 7, 2003, and October 8, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Page 1). Note that the PTE

of VOC and HAPs from clean room Fab III was calculated based on the total VOC/HAP input minus the total VOC/HAP in the shipped out waste.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	--
PM-10	--
SO ₂	--
VOC	23.3
CO	--
NO _x	--

HAP's	Potential To Emit (tons/year)
Methanol	0.04
Trichloroethane	0.17
TOTAL	0.21

Justification for Modification

This modification is being performed through a Part 70 Minor Source Modification pursuant to 326 IAC 2-7-10.5(d)(4)(B), as the potential to emit VOC from this modification is less than 25 tons/yr and greater than 10 tons/yr. The permit modification is being performed through a Part 70 Minor Permit Modification pursuant to 326 IAC 2-7-12(b) because this modification meets all the requirements in 326 IAC 2-7-12(b)(1).

County Attainment Status

The source is located in Howard County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Howard County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Howard County has been classified as attainment or unclassifiable for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (c) **Fugitive Emissions**
 Since this type of operation is not in one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	Less than 100
PM-10	Less than 100
SO ₂	Greater than 100, but less than 250
VOC	Greater than 250
CO	Less than 100
NO _x	Greater than 250

- (a) This existing source is a major stationary source because at least one of the attainment regulated pollutants (VOC and NO_x) is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions are based upon the Technical Support Document (TSD) for the source's Part 70 Permit (T067-6505-00061), issued on October 21, 2002.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
PTE of Clean Room Fab III after this Modification	-	-	-	23.3	-	-	0.21
*Actual Emissions from Clean Room Fab III	-	-	-	6.5	-	-	Negligible
PTE of this Modification	-	-	-	16.8	-	-	0.21
PSD Significant Thresholds	25	15	40	40	100	40	NA

*Note: This is the averaged actual emissions from the climate controlled clean room Fab III in 2001 and 2002.

This modification to an existing major stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.
- (c) This modification does not involve a pollutant-specific emissions unit:
 - (1) With the potential to emit before controls equal to or greater than one hundred (100) tons per year, and
 - (2) That is subject to an emission limit and has a control device that is necessary to meet that limit.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this modification.

State Rule Applicability - Climate Controlled Clean Room Fab III

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

The operations at clean room Fab III, which includes the wet process and the silicon wafer coating process, were constructed in 1984 and modified in 2003 (this modification). The potential VOC emissions, which were calculated using the VOC input minus the VOC in the shipped out waste, are less than 25 tons/yr after this modification. Therefore, the requirements of 326 IAC 8-1-6 (BACT) are not applicable. Any change or modification which may increase the potential VOC emissions before control from clean room Fab III to greater than twenty-five (25) tons per year must be approved by the Office of Air Quality before any such change may occur.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Compliance with the VOC usage limit for the climate controlled clean room Fab III is based on recordkeeping. Therefore, there are no specific compliance monitoring requirements applicable to this modification.

Proposed Changes

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

- (f) One (1) semiconductor system, referred to as EU_CR, consisting of the following emission units:
- (2) One climate controlled clean room, designated as Fab I ~~wet room~~, constructed in 1981, **including one (1) wet process** exhausting through five (5) wet scrubbers with maximum **air flow rates capacities** of 3400 CFM, 8950 CFM, 12150 CFM, 20000 CFM, and 20000 CFM, respectively, **and one (1) silicon wafer coating process.**
 - ~~(3) One (1) silicon wafer coating room, designated as Fab I yellow room, constructed in 1981;~~
 - ~~(4 3) One (1) climate controlled clean room, designated as Fab V wet room, constructed in 1981, including one (1) wet process~~ exhausting through two (2) wet scrubbers with maximum **air flow rates capacities** of 12000 CFM and 16000 CFM, **and one (1) silicon wafer coating process.**
 - ~~(5) One (1) silicon wafer coating room, designated as Fab V yellow room, constructed in 1984;~~
 - ~~(6 4) One (1) climate controlled clean room, designated as Fab III wet room, constructed in 1984 and modified in 2003, including one (1) wet process~~ exhausting through four (4) wet scrubbers with maximum **air flow rates capacities** of 40000 CFM each ~~;~~, and **one (1) silicon wafer coating process.**
 - ~~(7) One (1) silicon wafer coating room, designated as Fab III yellow room, constructed in 1984.~~

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (e) One (1) quad-fine-pitch (QFP) plater with a 3400 CFM fume scrubber, constructed in 1992, referred to as EU_EP, and exhausting to stack 6-K24-3.
- (f) One (1) semiconductor system, referred to as EU_CR, consisting of the following emission units:
- (1) One (1) acid mixing operation for nitric, phosphoric, sulfuric, and hydrofluoric acids, constructed in 1980, with an average throughput of 9,990 gallons/yr of sulfuric acid, 3,400 gallons/yr of phosphoric acid, 7,400 gallons/yr of nitric acid, 8,000 gallons/yr of hydrofluoric acid, and 4,100 gallons/yr of acetic acid, controlled by one (1) fume scrubber, also constructed in 1980, with a maximum capacity of 25,000 CFM.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Facility Description [326 IAC 2-7-5(15)] (Continued)

- (2) One climate controlled clean room, designated as Fab I ~~wet room~~, constructed in 1981, **including one (1) wet process** exhausting through five (5) wet scrubbers with maximum **air flow rates capacities** of 3400 CFM, 8950 CFM, 12150 CFM, 20000 CFM, and 20000 CFM, respectively, **and one (1) silicon wafer coating process.**
- ~~(3) One (1) silicon wafer coating room, designated as Fab I yellow room, constructed in 1981;~~
- (4 3) One (1) climate controlled clean room, designated as Fab V ~~wet room~~, constructed in 1981, **including one (1) wet process** exhausting through two (2) wet scrubbers with maximum **air flow rates capacities** of 12000 CFM and 16000 CFM, **and one (1) silicon wafer coating process.**
- ~~(5) One (1) silicon wafer coating room, designated as Fab V yellow room, constructed in 1984;~~
- (6 4) One (1) climate controlled clean room, designated as Fab III ~~wet room~~, constructed in 1984 **and modified in 2003, including one (1) wet process** exhausting through four (4) wet scrubbers with maximum **air flow rates capacities** of 40000 CFM each ;, and **one (1) silicon wafer coating process.**
- ~~(7) One (1) silicon wafer coating room, designated as Fab III yellow room, constructed in 1984.~~

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

- (a) The potential to emit VOC of **emissions from each of the climate controlled clean rooms Fab I, Fab V, and Fab III before control** ~~the one (1) silicon wafer coating room, designated as Fab I yellow room, and one (1) climate controlled clean room, designated as Fab I wet room,~~ **is are** less than 25 tons per year. Therefore the requirements of 326 IAC 8-1-6 are not applicable.

Any change or modification which may increase the potential emissions of VOC, **which are calculated using the total VOC input minus the VOC in the shipped out waste**, to greater than 25 tons per year from these units must be approved by the Office of Air Quality before any such change may occur.

- ~~(b) The potential to emit VOC of the one (1) climate controlled clean room, designated as Fab V wet room, and one (1) silicon wafer coating room, designated as Fab V yellow room, is less than 25 tons per year. Therefore the requirements of 326 IAC 8-1-6 are not applicable.~~

~~Any change or modification which may increase the potential emissions of VOC to greater than 25 tons per year from these units must be approved by the Office of Air Quality before any such change may occur.~~

- ~~(c) The potential to emit VOC of the one (1) climate controlled room clean room, designated as Fab III wet room, and one (1) silicon wafer coating room, designated as Fab III yellow room, is less than 10 tons per year. Therefore the requirements of 326 IAC 8-1-6 are not applicable.~~

~~Any change or modification which may increase the potential emissions of VOC to greater than 10 tons per year from these units must be approved by the Office of Air Quality before any such change may occur.~~

D.6.5 Particulate Matter

In order to comply with Condition D.6.32, the fume and wet scrubbers shall be in operation and control emissions from the facilities at all times that the facilities are in operation.

D.6.7 Parametric Monitoring

- (a) The Permittee shall monitor and record the scrubber liquor pH, pressure drop, and recirculation flow rate of each of the scrubbers, at least once per week when the associated facilities are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the scrubbers is outside the following normal ranges:

Scrubber	Pressure Drop (inches of water)
Acid mixing scrubber	0.1 - 3
Fab 1 scrubber - Dept. 8026 5ID Room TRI-MER DE No. 169970	0.1 - 1.2
Fab 1 scrubber - 5ID Room (Dept. 8026) Harrington DE No. (none)	0.1 - 2.5
Fab 1 scrubber - SensorFAB (8026) Harrington DE No. 177150 (826B)	0.1 - 3
Fab 1 scrubber - Dept. 8026 SensorFAB East (VIRON) DE No. (none) (SB101A)	0.1 - 3.5
Fab 1 scrubber - Dept. 8026 SensorFAB West (VIRON) DE No. (none) (SB100A)	0.1 - 3.5
Fab V scrubber - Dept. 8327 Bump Room (VIRON) DE No. 198849 (SB104)	0.1 - 3.5
Fab V scrubber - Dept. 8327 Bump Room (Harrington) DE No. 158827	0.1 - 3
QFP scrubber	0.1 - 1.2
Fab III - Dept. 8294 SC-1 (Heil)	0.5 - 8
Fab III - Dept. 8294 SC-2 (Heil)	0.5 - 8
Fab III - Dept. 8294 SC-3 (Heil)	0.5 - 8
Fab III - Dept. 8294 SC-4 (Heil)	0.5 - 8

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. When for any one reading, the recirculation flow rate of each of the scrubbers is outside the following normal ranges:

Scrubber	Recirculation Flow Rate (gpm)
Acid mixing scrubber	150 - 350
Fab 1 scrubber - Dept. 8026 5ID Room TRI-MER DE No. 169970	3 - 30
Fab 1 scrubber - 5ID Room (Dept. 8026) Harrington DE No. (none)	100 - 180
Fab 1 scrubber - SensorFAB (8026) Harrington DE No. 177150 (826B)	100 - 180
Fab 1 scrubber - Dept. 8026 SensorFAB East (VIRON) DE No. (none) (SB101A)	140 - 200
Fab 1 scrubber - Dept. 8026 SensorFAB West (VIRON) DE No. (none) (SB100A)	140 - 200
Fab V scrubber - Dept. 8327 Bump Room (VIRON) DE No. 198849 (SB104)	100 - 180

Fab V scrubber - Dept. 8327 Bump Room (Harrington) DE No. 158827	120 - 180
QFP scrubber	3 - 15
Fab III - Dept. 8294 SC-1 (Heil)	260 200 - 340
Fab III - Dept. 8294 SC-2 (Heil)	260 200 - 340
Fab III - Dept. 8294 SC-3 (Heil)	260 200 - 340
Fab III - Dept. 8294 SC-4 (Heil)	260 200 - 340

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 067-18089-00061. The operation of this proposed modification shall be subject to the conditions of the proposed Part 70 Minor Permit Modification No. 067-18036-00061.